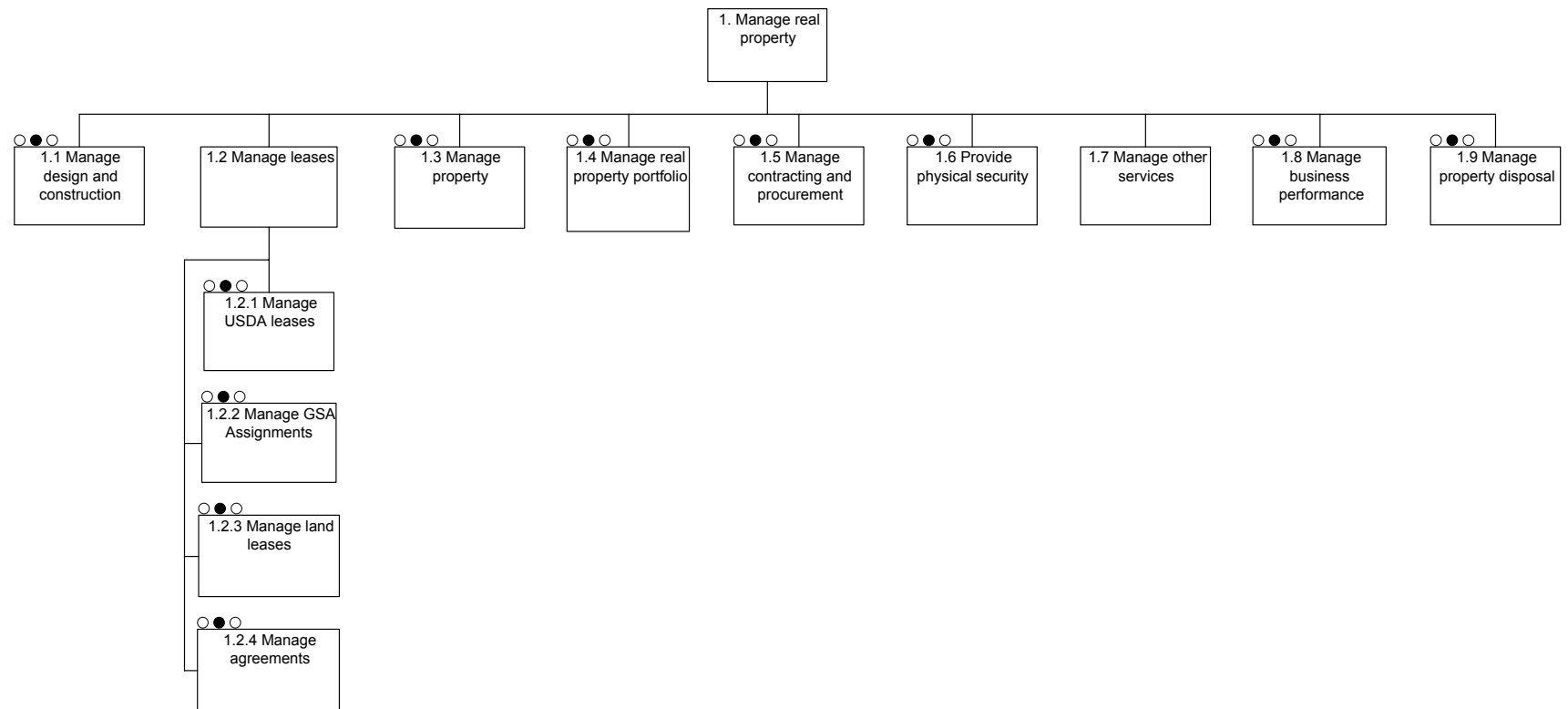# Chapter 1
Business Architecture

The business architecture represents the functions and processes that support the business, the organizations that perform the business, the locations where the business is performed, and the factors that could cause the business to change. In other words, the business architecture addresses how the mission-critical functions of the organization are accomplished. It is a portrayal of how the organization actually accomplishes its mission rather than how it is organizationally structured to manage its mission. The business architecture also encompasses a strategic direction that an organization strives to attain. Major influences on the business architecture are laws and regulations, external and internal policies, organizational structures, organizational culture, business change, people, budgets, and technology drivers. This layer ignores any physical constraints and contains no element of system design.

This chapter provides a high-level business architecture depicting and describing the functional areas and functions performed by USDA. The chapter begins with functional hierarchy diagrams and descriptions of USDA's functional areas and functions. It then describes USDA's organizational structure and identifies which organizational entities perform the business functions.

USDA'S FUNCTIONAL HIERARCHY

USDA's functional hierarchy identifies major business functional areas and functions. A functional area is a classification for a logical grouping of related business activities such that it supports or accomplishes an aspect of USDA's mission and vision. A function is a logical grouping of related business activities such that it further defines the functional area in which it belongs. Functions define "what" but not "how" these activities are performed.

Figure 1-1.

```
                                    ┌──────────────────┐
                                    │ 1. Manage real   │
                                    │ property         │
                                    └──────────────────┘
```

○●○
1.1 Manage
design and
construction

1.2 Manage leases

○●○
1.3 Manage
property

○●○
1.4 Manage real
property portfolio

○●○
1.5 Manage
contracting and
procurement

○●○
1.6 Provide
physical security

1.7 Manage other
services

○●○
1.8 Manage
business
performance

○●○
1.9 Manage
property disposal

○●○
1.2.1 Manage
USDA leases

○●○
1.2.2 Manage GSA
Assignments

○●○
1.2.3 Manage land
leases

○●○
1.2.4 Manage
agreements

Functional decomposition for 1. Manage real property

1. Manage real property—provide space to clients .

1.1 Manage design and construction—manage the design and construction of new buildings, the renovation of existing buildings, and the development planning of new buildings and grounds.

1.2 Manage leases—manage leases including USDA leases, GSA assignments, and land leases

1.2.1 Manage USDA leases—prepare, execute and terminate USDA lease agreements.

1.2.2 Manage GSA Assignments—support the preparation, execution, and termination of GSA Assignments.

1.2.3 Manage land leases—prepare, execute and terminate land lease agreements.

1.3 Manage property—operate and maintain buildings and provide concierge services.

1.4 Manage real property portfolio—provide the necessary resources to maintain the current real property assets and acquire new or replacement assets.

1.5 Manage contracting and procurement—manage contracting and procurement of goods and services.

1.6 Provide physical security—perform all activities related to planning and delivering security resources for all USDA-owned or leased facilities.

1.7 Manage other services—perform special consulting and manage areas of furniture, supplies, and equipment.

1.8 Manage business performance—provide USDA real property management work force the necessary resources, guidance, and motivation to improve performance through performance measures and reward system.

1.9 Manage property disposal—manage the use and disposal of surplus real property government-wide.
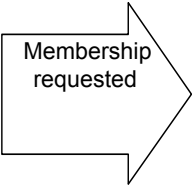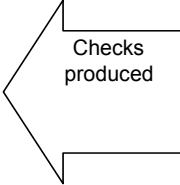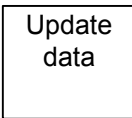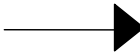
Chapter 2
Business Architecture

DETAILED PROCESS MAPS AND DESCRIPTIONS

We provide detailed process maps for the business functions that are core to managing the USDA. The process maps are as follows:

1.1   Manage design and construction
1.2.1 Manage USDA leases
1.2.2 Manage USDA assignments
1.2.3 Manage land leases
1.3   Manage property
1.4   Manage real property portfolio
1.5   Manage contracting and procurement
1.6   Provide physical security
1.8   Manage business performance
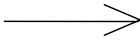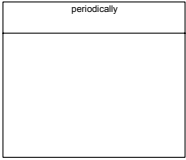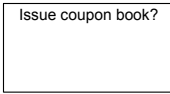1.9   Manage property disposal

The symbols used in the maps are as follows:

Symbol	Definition	Symbol	Definition
Event Membership requested	Event that triggers processes. Denoted by a right-facing arrow. May or may not appear in a swim lane due to individual modeling technique.	Result Checks produced	Outcome of a process. Denoted by a left-facing arrow. May or may not appear in a swim lane due to individual modeling technique.
Process/activity Update data	Activity or group of activities. Denoted by a rectangular box.	Mandatory connector	Path that the process always follows.
Swim lane Benefits	Delimits series of activities that are performed by a single logical organization.	Optional connector	Path that the process may follow, depending on the conditions.

Symbol	Definition	Symbol	Definition
Iteration box periodically	Activity or group of activities that occur more than once for a period of time or until a condition is met.	Decision point Issue coupon book?	Presence of a question mark denotes an activity or group of activities that is a decision point from which multiple activities or groups of activities may occur.

1.1 Manage design and construction

USDA Agency

Design and construction services requested → Conduct feasibility study → Develop prospectus → Approve project → Fund project

Acquire site → Design and bid → Perform and monitor construction → Close out construction

Provide building startup and turnover services

new construction / major R & A → Project completed / Building in service / Books updated

new construction / major R&A

Purchased fixed assets received → Record asset information

Donated assets received → Begin providing service using asset

Request received from customer → Prepare depreciation schedules

Process invoice → Update and maintain asset information

Vendor: Invoice submitted

OCFO: Input depreciation schedules and service dates → Financial transactions recorded
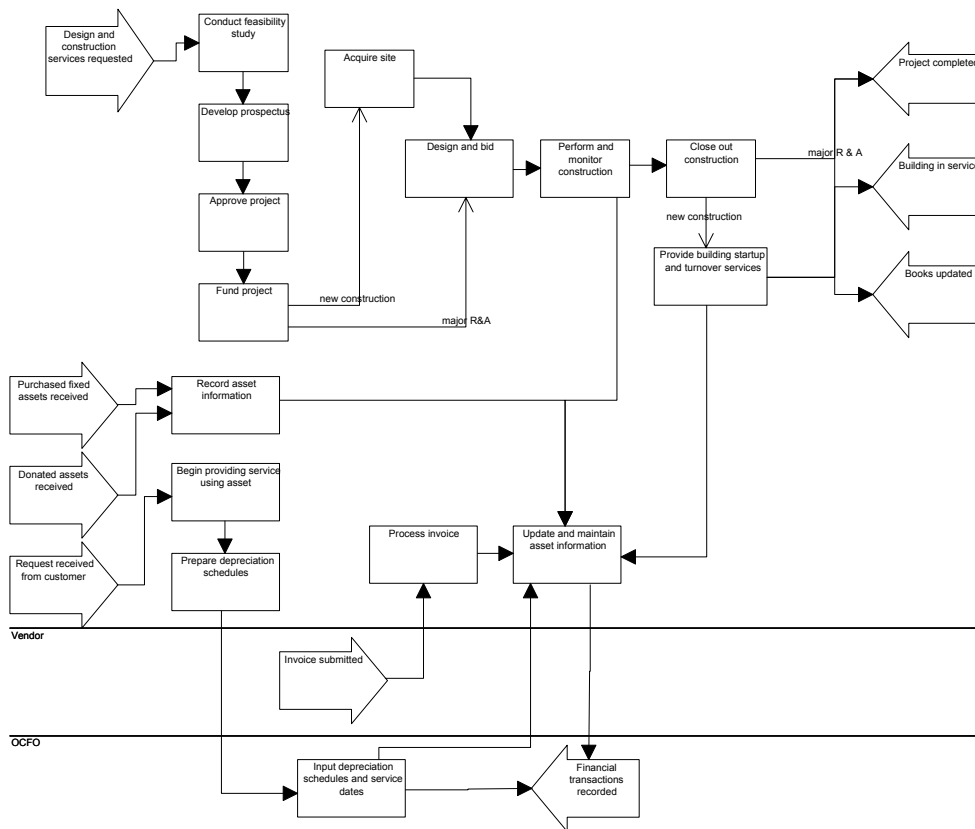
Diagram Description

Events

Design and construction services requested—design and construction services are requested. USDA acquires space primarily through leases, but at times, there is a demand for new space, which must be designed and constructed.

Donated assets received—USDA Agency has received donated assets.

Invoice submitted—USDA Agency submitted an invoice.

Purchased fixed assets received—USDA Agency has received purchased fixed assets.

Request received from customer—USDA Agency has received request from customer.

Process Steps

Acquire site—USDA Agency and the Office of Procurement and Property Management acquires site.

Approve project—USDA Agency and the Office of Procurement and Property Management approves the project.

Begin providing service using asset—USDA Agency begin providing service using asset.

Close out construction—USDA Agency and the Office of Procurement and Property Management corrects all noted deficiencies, provides documentation and warranties for all equipment placed in the building, and completes training for operations and maintenance personnel.

Conduct feasibility study—USDA Agency and the Office of Procurement and Property Management studies feasibility of fulfilling proposed space request. The study identifies basic requirements, analyzes and evaluates project alternatives, and recommends the best and preferred solution in consideration of asset management, portfolio, and facility needs.

Design and bid—USDA Agency and the Office of Procurement and Property Management procures and manages design services that provide the vision for the layout and look of the space within the approved budget. This process includes planning projects, developing cost, and schedule estimates. This process also includes the award, acceptance, monitoring and payment for contracted design services.

Develop prospectus—USDA Agency and the Office of Procurement and Property Management develops a summary of prospectus on the project. This includes in-

formation on the project scope and requirements, implementation, budget, and other factors on the financial viability of the project.

Fund project—USDA Agency and the Office of Procurement and Property Management provides funding to the project.

Input depreciation schedules and service dates—OCFO inputs depreciation schedules and service dates.

Perform and monitor construction—Engineers monitor and evaluate renovation, alteration, or new construction work. This process includes inspection services.

Prepare depreciation schedules—USDA Agency develop depreciation schedules.

Process invoice—USDA Agency processes the invoice for fixed asset; enters F.A. information.

Provide building startup and turnover services—The staff provide start-up services for new construction such as furniture planning, telecommunications planning, and interior design.

Record asset information—USDA Agency records asset related information.

Update and maintain asset information—USDA Agency updates and maintains asset information.

Results

Books updated—Books are updated when project is complete. Depreciation begins at this time.

Building in service—The building is accepted and is in service.

Financial transactions recorded—OCFO recorded financial transactions.

Project completed—the major R&A or new construction project is completed.

1.2.1 Manage USDA leases

USDA Agency

Need for space formalized → Submit formal request for space → Determine if USDA Agency has authority to process space request — If lease or assignment → Space request sent to GSA

Determine if USDA Agency has authority to process space request ↓ Review space request ↓ Approve request for space

RPLO

Initiate project ↓ Develop requirements ↓ Advertise requirements ↓ Conduct market surveys → Issue solicitation offers → Negotiate based on solicitation → Award contract

Issue solicitation offers ↑ Offers received

Award contract ↑ Record building and lease information ↑ Manage build-out of space ↑ Inspect space → Occupy approved space ↓ Manage and administer lease → Request satisfied
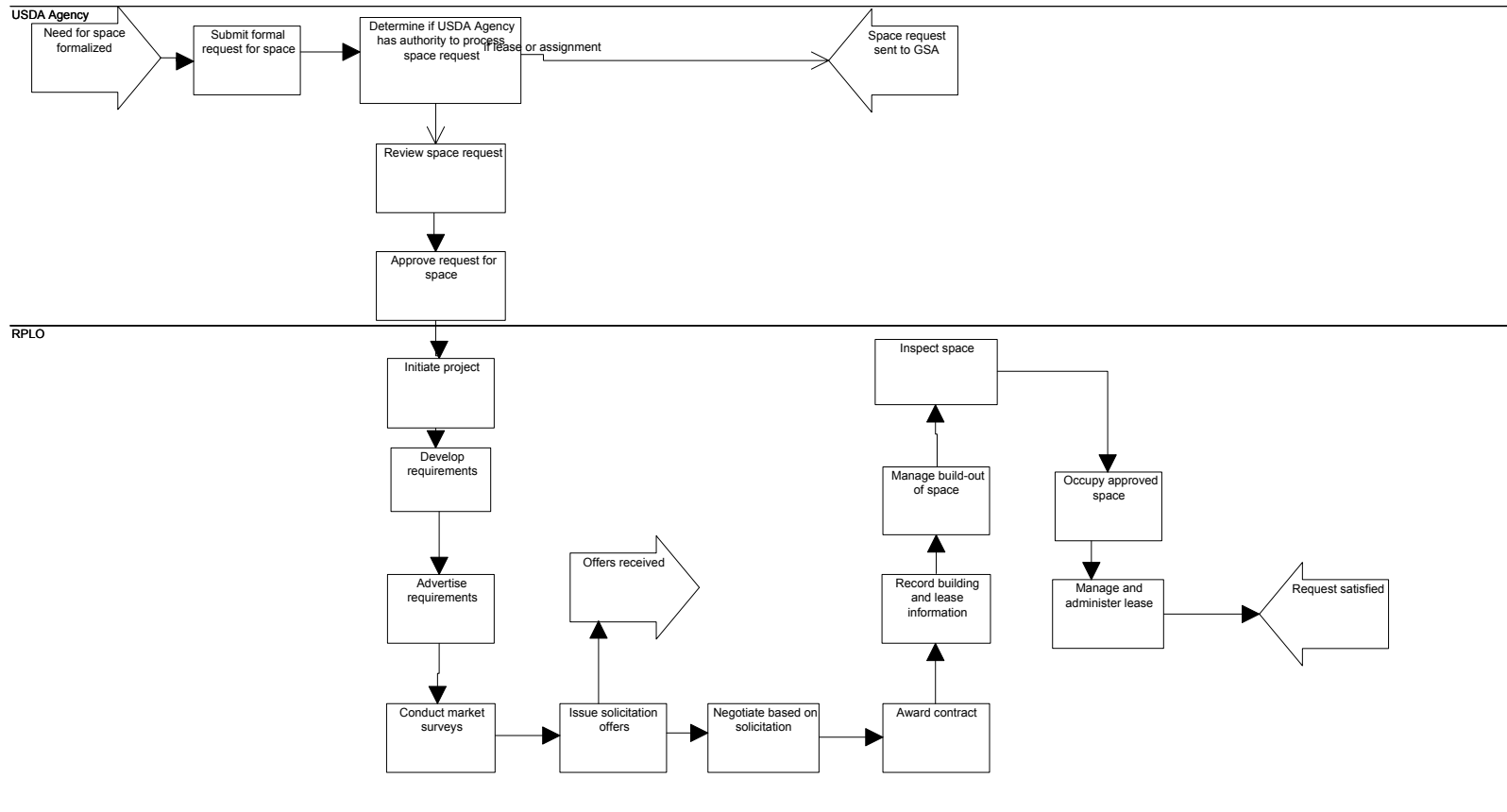
Diagram Description

Events

Need for space formalized—The USDA or USDA Agency has an internally for-
malized and justified need for new space to conduct its operations.

Offers received—RPLO received offers.

Process Steps

Advertise requirements—RPLO advertises requirements in newspapers, mailing
lists, etc.

Approve request for space—USDA Agency approves request for space.

Award contract—When an agreement has been reached with the offeror, the
RPLO sends the award package to the offeror.

Conduct market surveys—RPLO conducts market surveys. RPLO reviews the
responses from advertising to determine options for space.

Determine if USDA Agency has authority to process space request—USDA
Agencies process requests for space if the space requested is in a major metropoli-
tan area, if the space is over 5000 square feet, or if the space is counter consolida-
tion.

Develop requirements—RPLO meets with the client to determine required devel-
opment to the space. The determination of these requirements may require the in-
volvement of a space planner, architects, or engineers. A schedule to meet these
requirements is also developed.

Initiate project—GSA initiates a project by gathering project details, contact in-
formation, and preliminary budget information.

Inspect space—RPLO inspects the built-out space to assess if it meets require-
ments.

Issue solicitation offers—RPLO issues solicitation offers.

Manage and administer lease—RPLO manage and administer the lease on an on-
going basis

Manage build-out of space—RPLO manages customization of the space as speci-
fied by the client.

Negotiate based on solicitation—RPLO evaluates all received offers and determine the best competitive offers. RPLO initiates the negotiation process to obtain the best offer according to client's requirements and price.

Occupy approved space—The occupant moves into the space.

Record building and lease information—RPLO records building and lease information.

Review space request—USDA Agency reviews the space requested.

Submit formal request for space—USDA Agency makes a formal request for new space by submitting an SF 81 or other type of communication.

Results

Request satisfied—The client occupies its space and is satisfied with services performed.

Space request sent to GSA—Space request is sent to GSA for GSA to process.

1.2.2 Manage GSA assignments

USDA Agency

Facilities Master Plan updated → Request for space sent to RPLO → Accept pro forma occupancy agreement → Monitor negotiations conducted on offers received → Approve inspection → Receive latest version of occupancy agreement and lease → Establish baseline → Montly / Reconciliation → Request satisfied

RPLO

Approve space request

GSA

Initiate project → Develop pro forma occupancy agreement → Negotiate based on solicitation offers received → Inspect and approve space → Finalize occupancy agreement and lease

USDA Budget office

Central rent account established
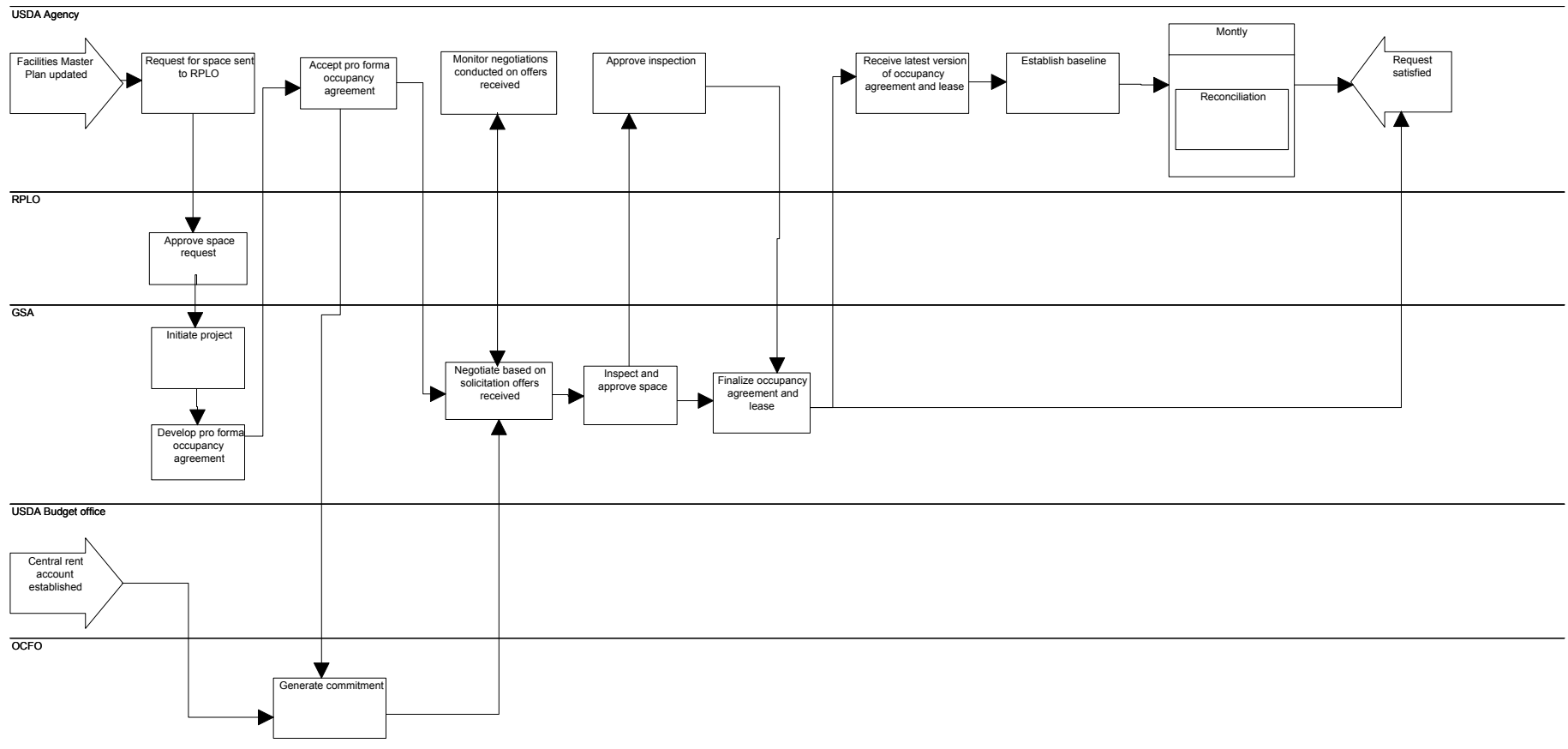
OCFO

Generate commitment

Diagram Description

Events

Central rent account established—USDA Budget Office established Central Rent Account.

Facilities Master Plan updated—USDA developed its Facilities Master Plan.

Process Steps

Accept pro forma occupancy agreement—USDA Agency accepts the pro forma occupancy agreement.

Approve inspection—USDA Agency approves GSA inspection of space. A USDA representative participates in walk through of site. GSA then establishes dates and rent is started on the following day.

Approve space request—RPLO validates and approves space request.

Develop pro forma occupancy agreement—GSA drafts an occupancy agreement with preliminary information. This initial agreement contains identification information, contact information, cost information, and appropriate ad hoc clauses.

Establish baseline—USDA Agency uses the lease and occupancy agreement to establish baseline for rent comparisons with GSA.

Finalize occupancy agreement and lease—GSA provides final updates to the occupancy agreement and lease, and the appropriate agency signs the document.

Generate commitment—OCFO generates commitment.

Initiate project—GSA initiates a project by gathering project details, contact information, and preliminary budget information.

Inspect and approve space—GSA inspects the built-out space to assess if it meets requirements.

Monitor negotiations conducted on offers received—USDA Agency monitors negations conducted by GSA of solicitation offers received. A USDA Agency representative is on-site to approve solicitation.

Negotiate based on solicitation offers received—GSA evaluates all received offers and determine the best competitive offers. GSA initiates the negotiation process to obtain the best offer according to client's requirements and price.

Receive latest version of occupancy agreement and lease—USDA reviews the occupancy agreement and lease summary or SF2 received from GSA. USDA updates the occupancy agreement on an ongoing basis. USDA uses the lease and occupancy agreement to create a packet used to track and manage the lease.

Reconciliation—USDA Agency conducts monthly reconciliation.

Request for space sent to RPLO—USDA Agency sent the request for space to the RPLO.

Results

Request satisfied—The client occupies its space and is satisfied with services performed.

1.2.3 Manage land leases

USDA Area, Forest, or Region

If term less then 10 years and/or less then $25,000 per year

Land requested → Submit request → Review and approve request → Survey site → Appraise site → Negotiate lease → Accept lease → Request satisfied

If term is greater than 10 years and/or greater then $25,000 per year

USDA Agency

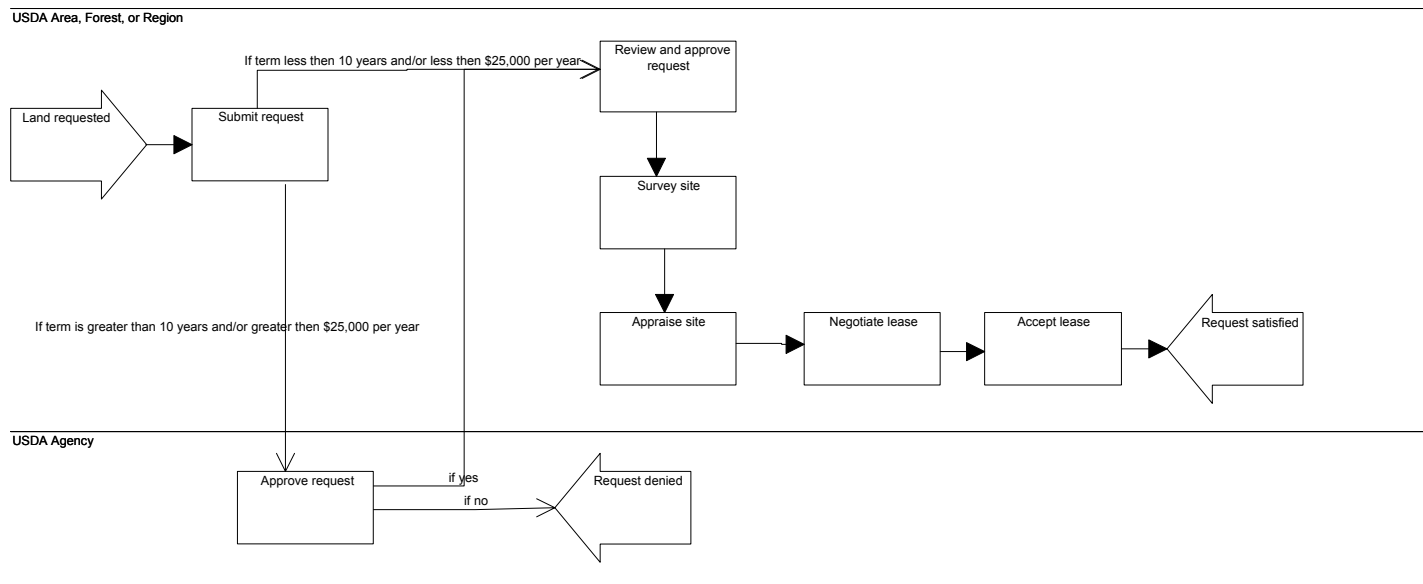Approve request → if yes / if no → Request denied

Diagram Description

Events

Land requested—Land is requested by USDA Area, Forest, or Region.

Process Steps

Accept lease—After negotiations are complete, USDA Area, Forest, or Region accepts lease.

Appraise site—USDA Area, Forest, or Region appraises site.

Approve request—USDA Agency reviews and approves request submitted by USDA Area, Forest, or Region.

Negotiate lease—USDA Area, Forest, or Region negotiates lease.

Review and approve request—USDA Area, Forest, or Region reviews and approves land request.

Submit request—USDA Area, Forest, or Region submits request for land.

Survey site—USDA Area, Forest, or Region conducts survey on site.

Results

Request denied—OCFO does not approve request and the request is denied.

Request satisfied—The client occupies its space and is satisfied with services performed.

1.2.4 Manage agreements

```
Program space          Determine if USDA Agency              if lease or assignment        Space request
need formalized        space need requires lease,                                          sent to GSA
                       assignment, or agreement

                       if agreement                                                        Space request
                                                                                           sent to USDA
                       Initiate agreement                                                  Agency for lease
                                                                                           processing

Establish terms and    Negotiate the terms    Sign agreement    Record building and    Manage and          Occupy approved    Request satisfied
conditions             and conditions                           agreement information  administer agreement space
```

OCFO

```
                       Verify fund availability   Establish fund source
                                       available

                       not available                                    Request denied
```
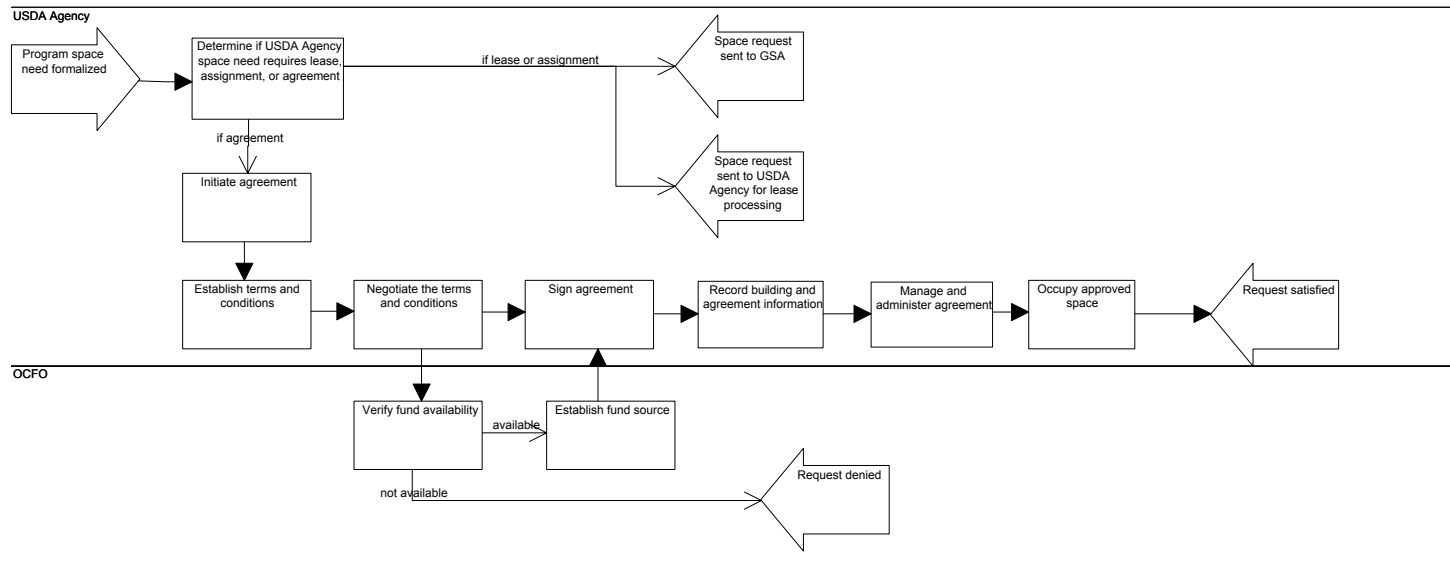
Diagram Description

Events

Program space need formalized—The USDA Agency, Area, Region, Division, or Lab has an internally formalized and justified need for new space to conduct its operations.

Process Steps

Determine if USDA Agency space need requires lease, assignment, or agreement—USDA Agency, Area, Region, Division, or Lab determines how to process space request by determining if it is a lease, assignment or agreement.

Establish fund source—OCFO establishes fund source.

Establish terms and conditions—USDA Agency, Area, Region, Division, or Lab establishes the terms and conditions of the agreement.

Initiate agreement—USDA Agency, Area, Region, Division, or Lab initiates the agreement according to type of agreement. Types of agreements include reimbursable agreements, cooperative agreements, use permits, revocable permits, MOU/MOAs, and easements.

Manage and administer agreement—RPLO manage and administer the agreement on an ongoing basis

Negotiate the terms and conditions—USDA Agency, Area, Region, Division, or Lab initiates the negotiation process to finalize the terms and conditions according to client's requirements and price.

Occupy approved space—The occupant moves into the space.

Record building and agreement information—USDA Agency, Area, Region, Division, or Lab records and tracks building and agreement information.

Sign agreement—USDA Agency, Area, Region, Division, or Lab signs the finalized agreement along with the appropriate parties involved.

Verify fund availability—OCFO verifies fund availability to meet space request.

Results

Request denied—OCFO does not approve request and the request is denied.

Request satisfied—The client occupies its space and is satisfied with services performed.

Space request sent to GSA—Space request is sent to GSA for GSA to process.

Space request sent to USDA Agency for lease processing—Space request sent to USDA Agency for lease processing
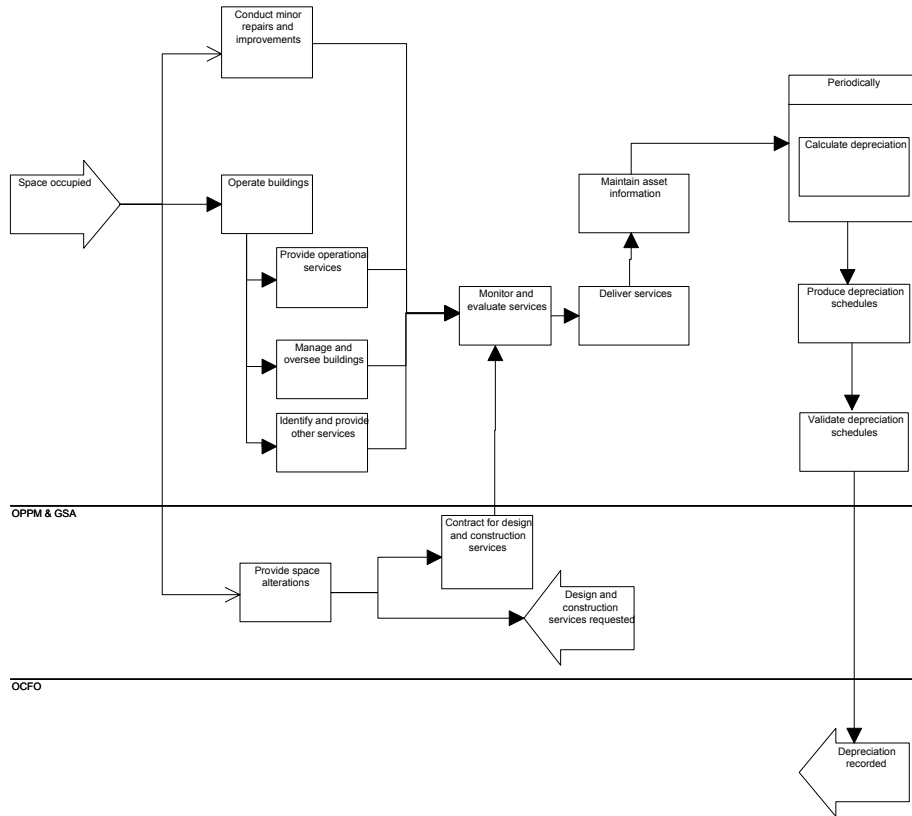
1.3 Manage real property

Diagram Description

Events

Space occupied—Client agency has occupied space for which USDA is responsible for delivering part or all of building services.

Process Steps

Calculate depreciation—USDA Agency calculates depreciation periodically.

Conduct minor repairs and improvements—USDA Agency determines, prioritizes and conducts repairs as needed. This function includes the award, acceptance, monitoring and payment of contracted services to perform these functions.

Contract for design and construction services—The Office of Procurement and Property Management and GSA obtain contracted services for design and construction.

Deliver services—USDA Agency delivers services that have been provided per customer specifications and performance standards.

Identify and provide other services—USDA Agency provides other services as applicable. For example, this function may include providing parking services.

Maintain asset information—USDA Agency updates and maintains asset information.

Manage and oversee buildings—USDA Agency monitors and evaluates building conditions, tenant needs and delivery of services; requests and coordinates repair and alteration activity, referring to building design information as needed.

Monitor and evaluate services—USDA Agency oversees and ensures the quality of construction activities.

Operate buildings—USDA Agency manages and operates buildings.

Produce depreciation schedules—USDA Agency produces depreciation schedules.

Provide operational services—USDA Agency provides janitorial, maintenance, utilities, landscaping, incidental repairs (< $10,000), and special emphasis programs (e.g., childcare, fire/life safety, concessions, energy conservation, and recycling) for space. This function includes the award, acceptance, monitoring, and payment of contracted services to perform these functions.

Provide space alterations—The Office of Procurement and Property Management and USDA determine, prioritize, and provide tenant-funded improvements consistent with USDA pricing policy, as requested. This function includes the award, acceptance, monitoring, and payment of contracted services to perform these functions.

Validate depreciation schedules—USDA Agency validates depreciation schedules.

Results

Depreciation recorded—OCFO recorded depreciation for property.

Design and construction services requested—design and construction services are requested. USDA acquires space primarily through leases, but at times, there is a demand for new space, which must be designed and constructed.
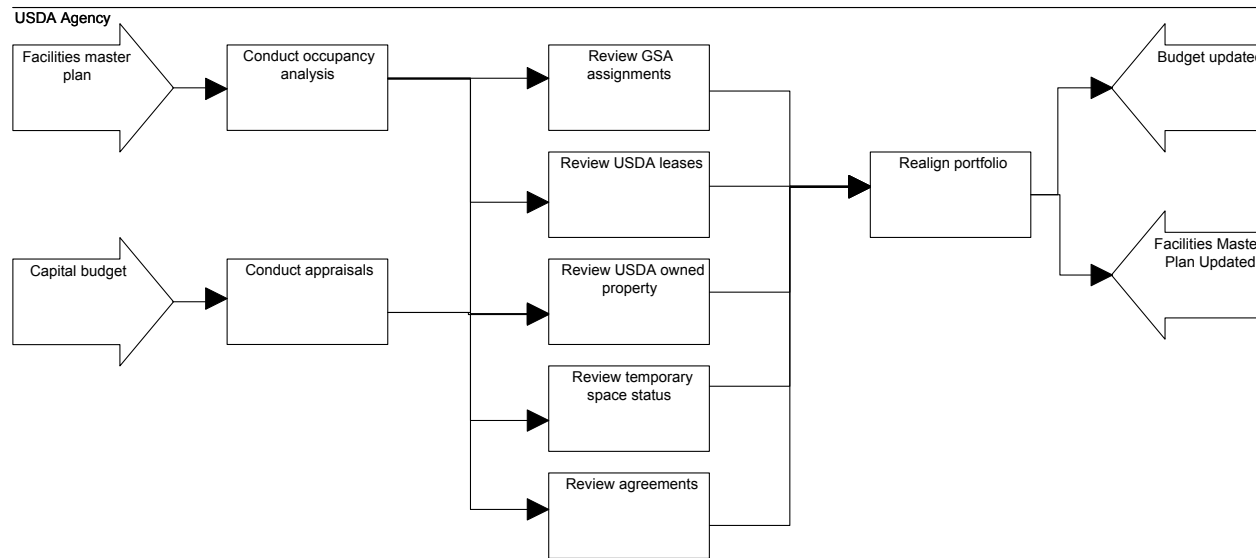
1.4 Manage real property portfolio

Facilities master plan	Conduct occupancy analysis	Review GSA assignments		Budget updated
Capital budget	Conduct appraisals	Review USDA leases	Realign portfolio	Facilities Master Plan Updated
		Review USDA owned property		
		Review temporary space status		
		Review agreements		

Diagram Description

Events

Capital budget—USDA developed its capital budget.

Facilities master plan—USDA developed its facilities master plan.

Process Steps

Conduct appraisals—USDA Agency performs appraisals on space.

Conduct occupancy analysis—USDA Agency analyzes status of space occupancy.

Realign portfolio—USDA Agency updates portfolio based on reviews conducted on space.

Review GSA assignments—USDA Agency reviews assignments provided by GSA.

Review USDA leases—USDA Agency reviews USDA leases.

Review USDA owned property—USDA Agency reviews USDA owned space.

Review agreements—USDA reviews agreements.

Review temporary space status—USDA reviews status of temporary space.

Results

Budget updated—Budget is updated in alignment to portfolio

Facilities Master Plan Updated—Facilities Master Plan is updated to reflect reviews conducted on space.
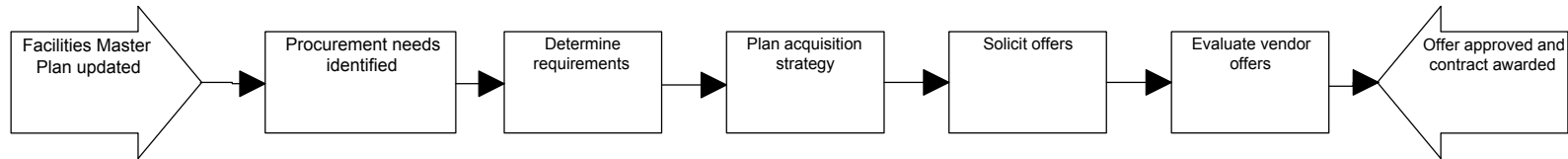
1.5 Manage contracting and procurement

```
Facilities Master      Procurement needs      Determine          Plan acquisition      Solicit offers      Evaluate vendor      Offer approved and
Plan updated      →    identified        →    requirements   →   strategy         →                    →   offers          →    contract awarded
```

Diagram Description

Events

Facilities Master Plan updated—USDA developed its Facilities Master Plan.

Process Steps

Determine requirements—USDA develops a set of functional and/or technical requirements, as appropriate, for use in the vendor selection process.

Evaluate vendor offers—USDA reviews vendor proposals in order to determine which offer best meets the requirements.

Plan acquisition strategy—USDA determines the strategy it is going to pursue to acquire the necessary products or services.

Procurement needs identified—OPPM or USDA Agency determines that products and/or services are needed.

Solicit offers—USDA offers are requested from vendors in order to determine the vendor that best meets requirements.

Results

Offer approved and contract awarded—USDA formally approves a specific offer and a contract is issued to the vendor in accordance with applicable laws and regulations.
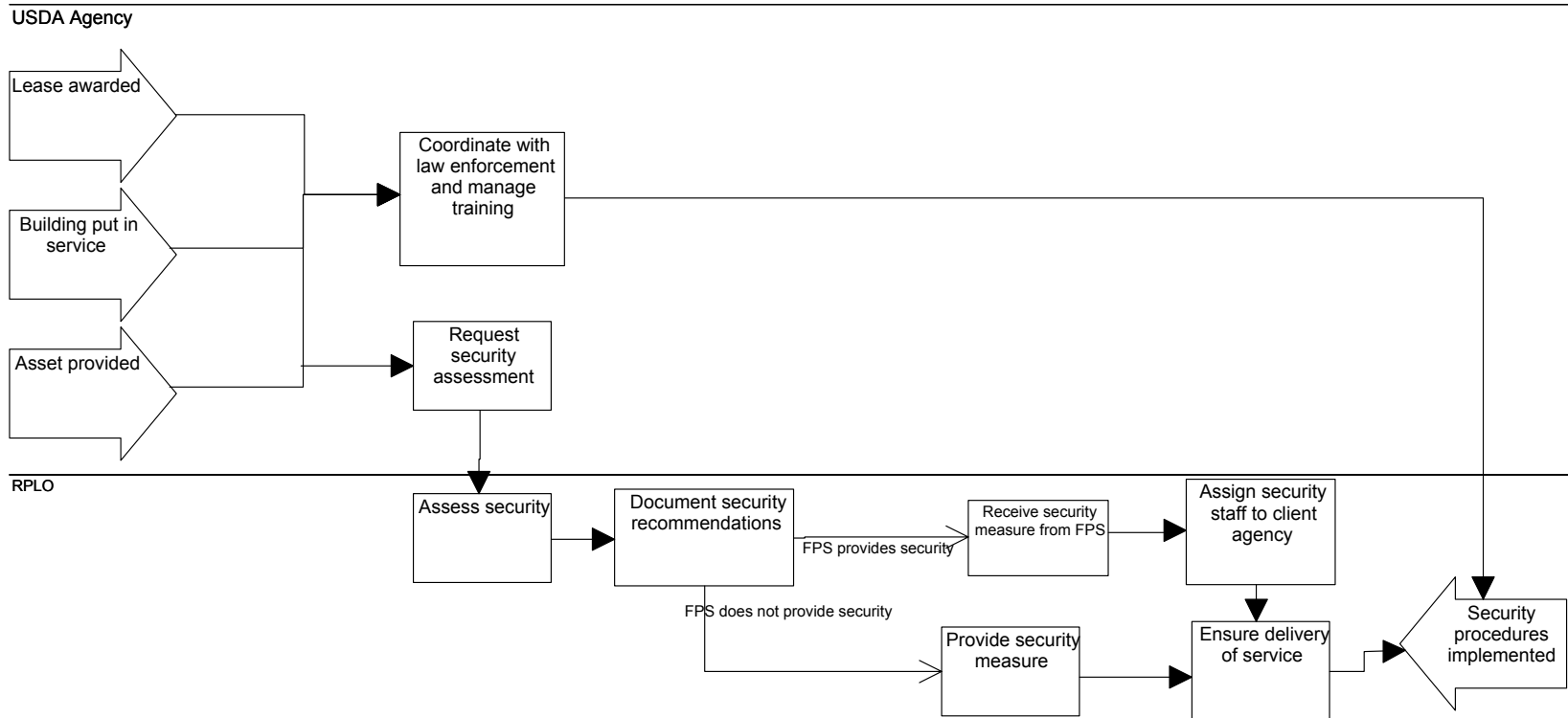
1.6 Provide physical security

USDA Agency

Lease awarded

Building put in
service

Asset provided

Coordinate with
law enforcement
and manage
training

Request
security
assessment

RPLO

Assess security

Document security
recommendations

FPS provides security

Receive security
measure from FPS

Assign security
staff to client
agency

FPS does not provide security

Provide security
measure

Ensure delivery
of service

Security
procedures
implemented

Diagram Description

Events

Asset provided—An asset is provided to USDA.

Building put in service—A building is completed and put in service.

Lease awarded—A lease is awarded to USDA.

Process Steps

Assess security—The Real Property Leasing Officer assessed the security of the property to be leased. This includes conducting a pre-move need assessment and risk analysis.

Assign security staff to client agency—The Real Property Leasing Officer identifies security staff to provide on-site security for the property.

Coordinate with law enforcement and manage training—USDA Agency and the Office of Procurement and Property Management meets ongoing customer security needs by coordinating with other law enforcement agencies. This includes implementing crime prevention programs and managing training as needed.

Document security recommendations—The Real Property Leasing Officer identifies the security measures that should be implemented based on findings from the security assessment.

Ensure delivery of service—The Real Property Leasing Officer monitors and evaluates delivery of services to ensure they meet performance standards. This includes conducting physical security surveys and testing security systems.

Provide security measure—The Real Property Leasing Officer provides on-site security for the property.

Receive security measure from FPS—FPS provides security measures.

Request security assessment—USDA Agency and the Office of Procurement and Property Management requests an assessment of security on the property to be leased.

Results

Security procedures implemented—The client implements the recommended procedures.
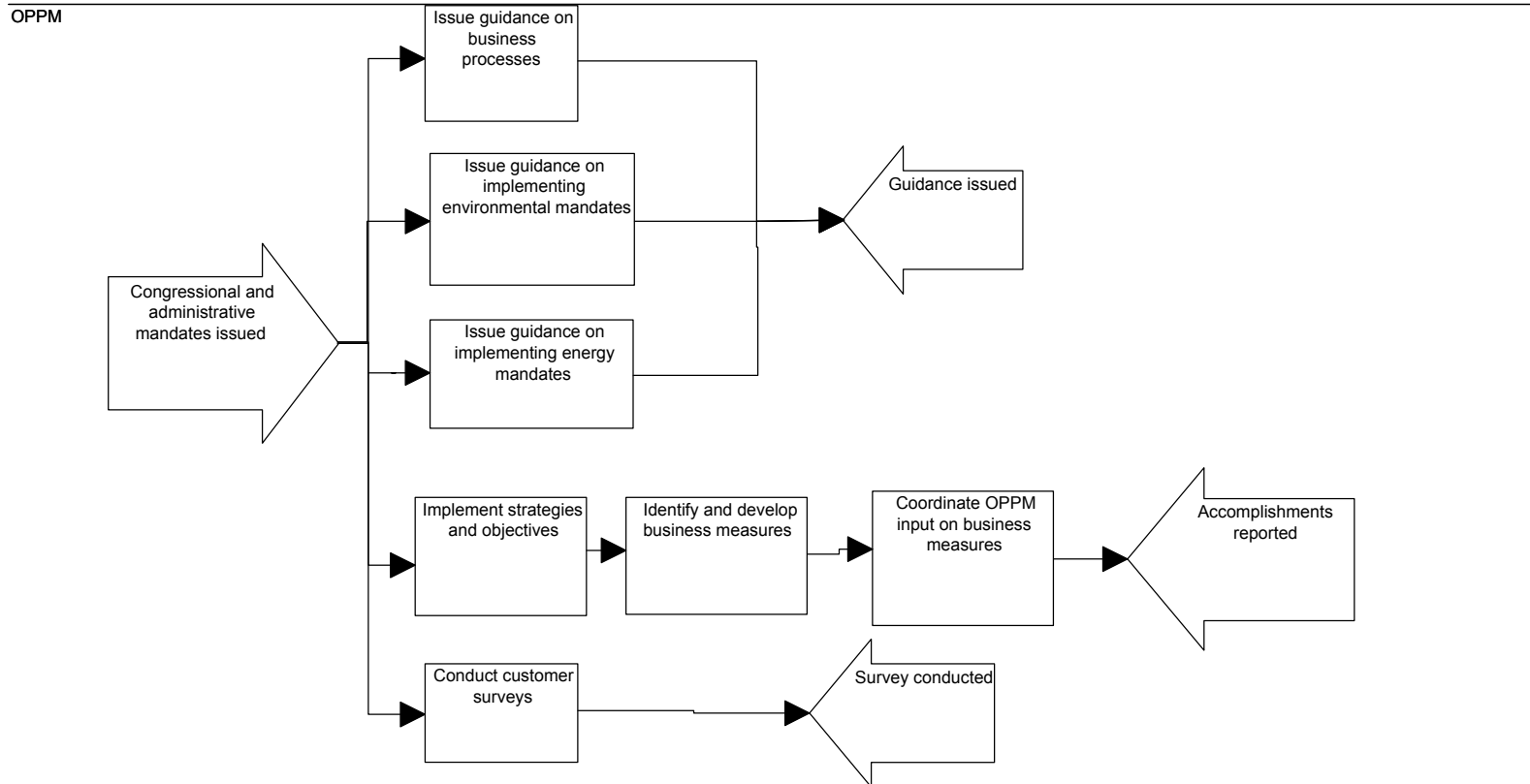
1.8 Manage business performance

Diagram Description

Events

Congressional and administrative mandates issued—Congressional and administrative mandates are issued.

Process Steps

Conduct customer surveys—The Real Property Leasing Officer administers and analyzes the customer survey.

Coordinate OPPM input on business measures—The Real Property Leasing Officer works with OPPM to resolve policy and operational issues in order to promote accurate reporting of performance measures. This function also includes gathering regional data related to reporting accomplishments.

Identify and develop business measures—The Real Property Lease Officer coordinates the implementation of the Government Performance and Results Act (GPRA). This includes developing business measures for internal and external use, developing the performance plan and coordinating input into the strategic plan. The division also manages efforts in order to link budget allocations to performance measures.

Implement strategies and objectives—USDA implement strategies and objectives designed to help achieve its performance metrics.

Issue guidance on business processes—The Real Property Leasing Officer provides leadership, guidance and tools for implementation of business processes for national programs. This function also involves identifying and providing training and development opportunities for employees.

Issue guidance on implementing energy mandates—The Real Property Leasing Officer develops, implements, and coordinates energy programs in support of the Administration and Congress by providing leadership, guidance tools and measures to assist central and regional offices in implementing energy initiatives.

Issue guidance on implementing environmental mandates—The Real Property Leasing Officer develops, implements, and coordinates environmental programs in support of the Administration and Congress by providing leadership, guidance tools and measures to assist central and regional offices in implementing environmental initiatives.

Results

Accomplishments reported—accomplishment of objectives defined in the business measures are reported and results are distributed

Guidance issued—USDA issued guidance on business processes, environmental mandates, and good practices.

Survey conducted—customer survey conducted and the results analyzed.
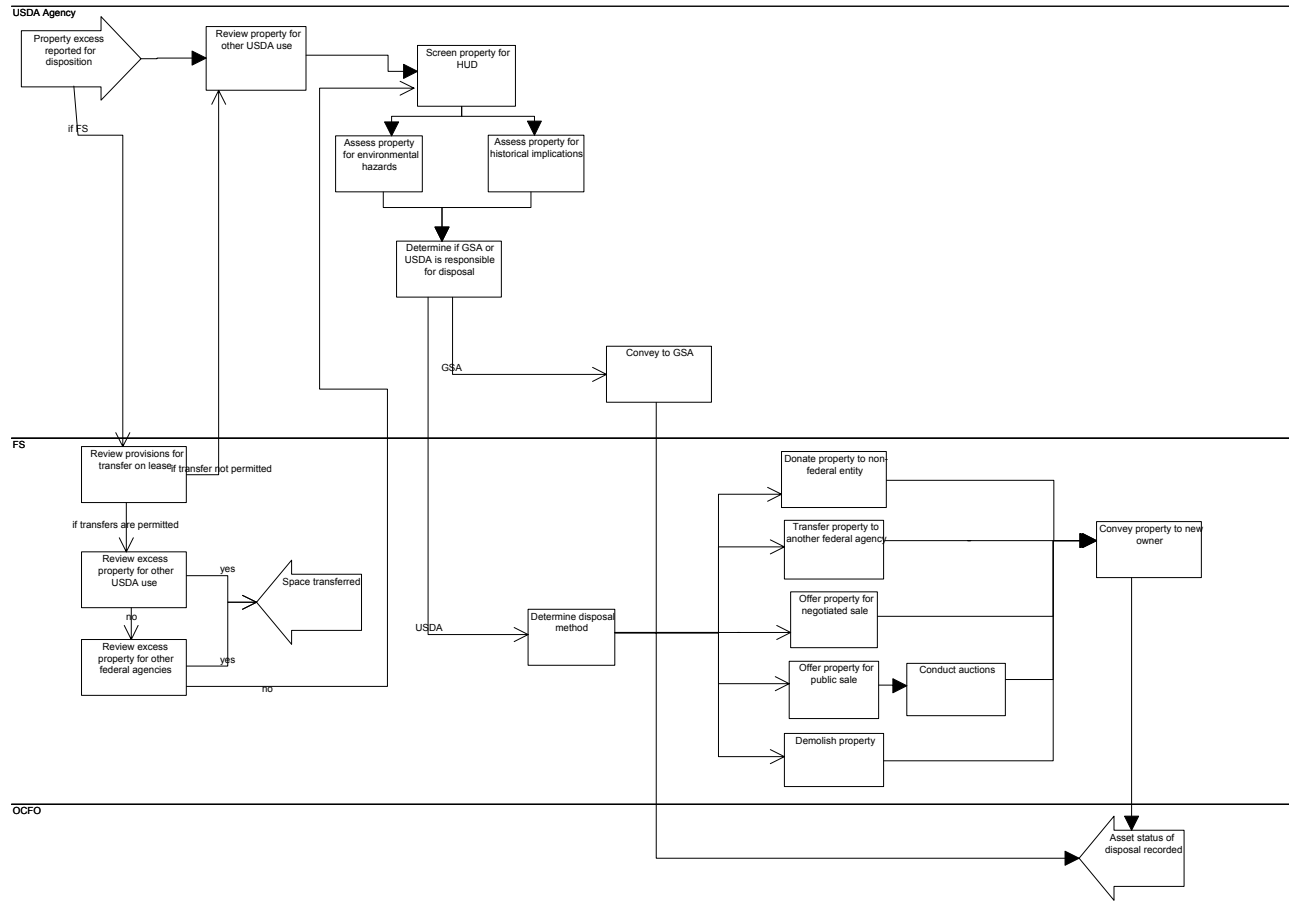
1.9 Manage property disposal

USDA Agency

Property excess reported for disposition

if FS

Review property for other USDA use

Screen property for HUD

Assess property for environmental hazards

Assess property for historical implications

Determine if GSA or USDA is responsible for disposal

GSA

Convey to GSA

FS

Review provisions for transfer on lease

if transfer not permitted

if transfers are permitted

Review excess property for other USDA use

yes

Space transferred

no

Review excess property for other federal agencies

yes

no

USDA

Determine disposal method

Donate property to non-federal entity

Transfer property to another federal agency

Convey property to new owner

Offer property for negotiated sale

Offer property for public sale

Conduct auctions

Demolish property

OCFO

Asset status of disposal recorded

Diagram Description

Events

Property excess reported for disposition—A property managed by USDA has reached a point where it will be more advantageous for USDA to dispose of it.

Process Steps

Assess property for environmental hazards—USDA assesses property to determine if environmental hazards are present.

Assess property for historical implications—USDA assesses property to determine if meets criteria for historical property categorization.

Conduct auctions—FS conducts sales to the public via a public auction, online auction, or auction by mail. The appraised fair market value is used as a guide to sell federal real estate.

Convey property to new owner—FS conveys property to new owner.

Convey to GSA—USDA conveys property disposal to GSA.

Demolish property—FS demolishes property and restores site.

Determine disposal method—FS determines how to dispose of the property. This includes conducting historical, environmental, and land use studies.

Determine if GSA or USDA is responsible for disposal—USDA Agency determines if GSA or USDA is responsible for property disposal.

Donate property to non-federal entity—FS donates property to nonfederal entity.

Offer property for negotiated sale—FS state or local governments the right of first refusal before a property is offered to the general public. There is no restriction on the use of this property.

Offer property for public sale—FS markets the property and makes it available for sale to the public. Sales are advertised extensively through a variety of traditional media and over the Internet.

Review excess property for other USDA use—USDA Agency reviews property excess for other USDA uses.

Review excess property for other federal agencies—USDA Agency reviews property excess for other federal agency uses.

Review property for other USDA use—USDA Agency reviews property excess for other USDA uses.

Review provisions for transfer on lease—FS reviews provisions on existing lease to determine if transfers are permitted.

Screen property for HUD—USDA Agency screens excess property for HUD, assessing for factors such as if the property is potential for homeless use.

Transfer property to another federal agency—FS facilitates an interagency transfer of an excess property if it is determined that the property will meet the requirements of another federal agency.

Results

Asset status of disposal recorded—OCFO records of asset status of disposal and makes appropriate updates.

Space transferred—Space is transferred.

Chapter 3
Data Architecture

The data architecture addresses the pieces of information (called data entities) needed by an organization to perform its business functions. By understanding the data architecture layer, an organization can improve data exchange and access, control redundancy, and improve data integrity.
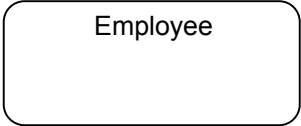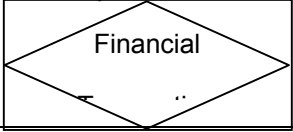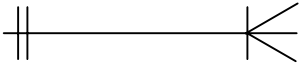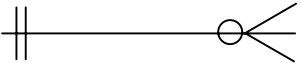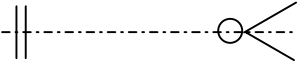
A well-defined data architecture should reflect what is happening in the business and application architecture layers. Many organizations often focus on managing staff, customers, material, and money. With a good understanding of the data assets it is managing, an organization also can derive the processes needed to manage those data.

Development of the data architecture for the USDA began with an analysis of documentation. From the documentation and subsequent discussions with key staff members, we developed an entity relationship diagram (ERD). As we developed the diagram, we described the data entities. We then established the relationships of the data entities to the office's business functions and to the office's organizational units. The data architecture is a high-level enterprise view of the office's data and their business relationships with each other. It is not a database design, although it could serve as a starting point of a logical database design.

ENTITY RELATIONSHIP DIAGRAM

The ERD identifies the specific data entities needed by USDA for real property management. Each box on the ERD represents a person, place, thing, concept, or event. The ERD also depicts the relationships of the data entities. The ERD is a work in progress; it represents high-level specific information that has been provided to us. The ERD can be expanded and refined as more information becomes available for analysis. Figure 3-1 shows the main data entities required to manage real property and the data elements associated with them. Definitions of these data elements can be found in Table 3-1. Following Table 3-1 is a list of data elements associated with processes.

The symbols used in the ERD are as follows:

Entity	Employee	An entity is a type of person, place, thing, or event that has meaning in the context of the organization's business and about which data may be stored. An entity name represents the term being defined. The definition should be a textual description of the data entity.
Weak entity	Request	A weak entity is an entity whose existence depends on the existence of another entity as in *Request*. A weak entity is always the child of a mandatory relationship or a super-sub relationship.
Associative entity	Financial	An associative entity is a type of weak entity that exists only to resolve a many-to-many relationship. It is the child of two or more identifying relationships.
Identifying relationship: one-to-many		A one-to-many identifying relationship indicates that the parent entity identifies the child entity. This identifying relationship is, by definition, a mandatory relationship.
Identifying relationship: one-to-zero, one, or many		This type of identifying relationship indicates a one-to-zero, one, or many relationship between a parent and a child entity.
Non-identifying relationship: one-to-zero, one, or many		A non-identifying relationship indicates that the child entity does not rely on the parent entity for its identification. There exists a one-to-zero, one, or many relationship between a parent and a child entity.
Identifying relationship: super-sub		A super-sub relationship indicates that a generic entity type (the super type) is divided into subtypes. The super type specifies the common attributes and relations that are shared by all subtypes (i.e., sub entities). Each subtype specifies the attributes or relations that are distinct from other subtypes.

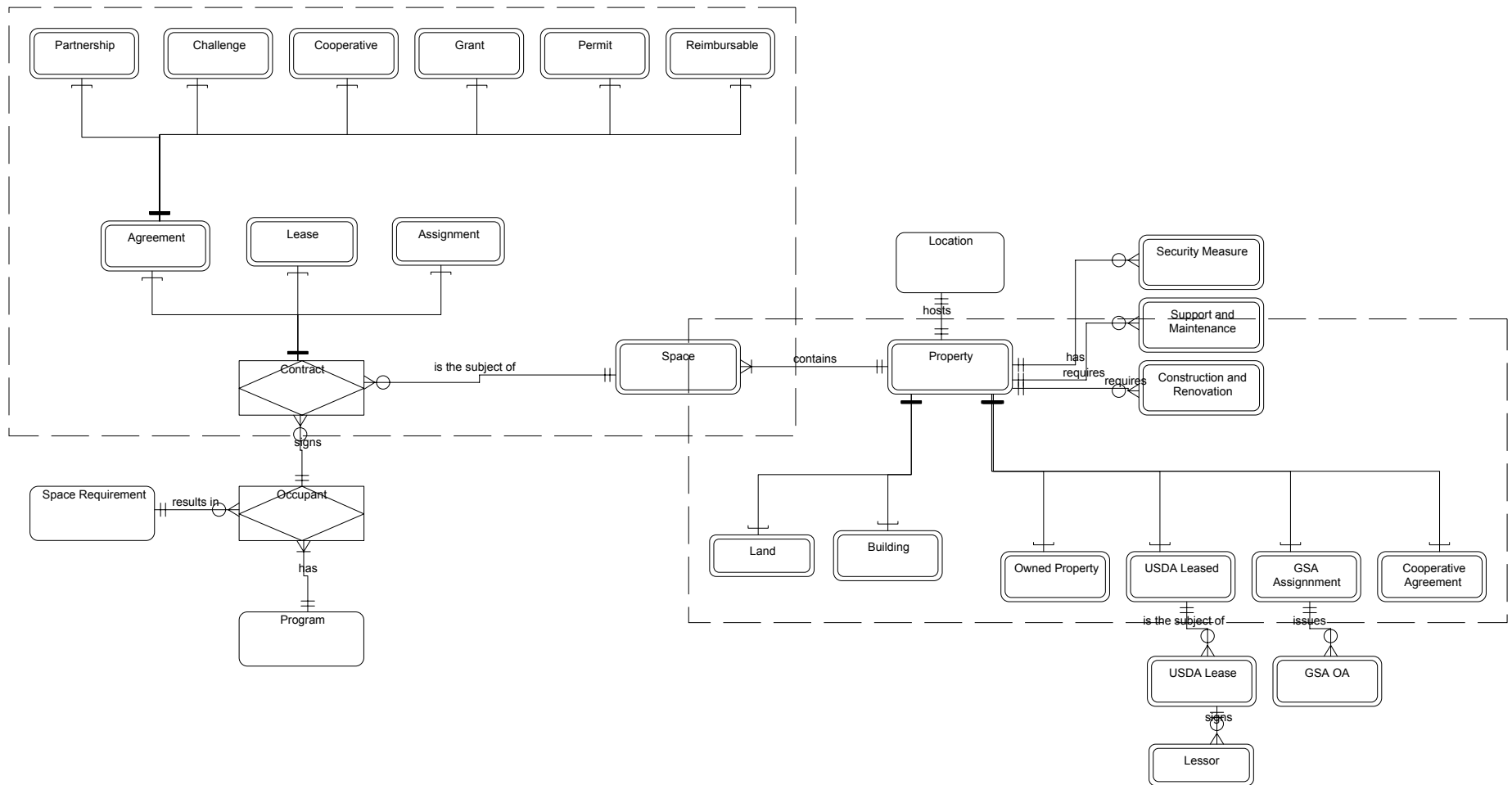| Identifying symbol: super-sub relationship	The entities contained with a dashed line box are connected via a super-sub relationship.

Figure 3-1. Entity Relationship Diagram

Table 3-1. Data Entities and Elements

Name	Description	Attributes
Agreement	A contract by which one conveys real estate or facilities for a specified term and for a specified rent when leases are not applied.	type of agreement budget information FACS ID FACS bureau code
Assignment	A contract by which GSA conveys real estate or facilities for a specified term and for a specified rent	adjustment for GSA GSA space use code
Building	A physical structure that is leased or owned by USDA.	building name building predominant use classification codes building measurement building negligible cost indicator historical building indicator
Challenge		mutual beneficial
Construction and Renovation	A program of building or improving a facility owned and managed by USDA.	security enhancement type security enhancement date security enhancement cost utilities enhancement type utilities enhancement date utilities enhancement cost infrastructure enhancement type infrastructure enhancement date infrastructure enhancement cost contractor POC contractor POC address contractor POC phone number contractor POC fax number contractor POC email
Contract	A contract between USDA and a federal agency that specifies the conditions under which the agency occupies a space managed by USDA.	transaction code fee term start date end date explanation of change easement rights cost allocation adjustment type adjustment date

Table 3-1. Data Entities and Elements

Name	Description	Attributes
		number of days effective termination clause services provided finance POC finance POC phone number finance POC fax number finance POC address finance POC email funding source allocation funding source amount budget source budget information funding source amount funding allocation agency agreement number common agreement number common vendor number COR COR POC COR POC address COR POC email COR POC fax number COR POC phone number cost per lease/consideration services provided vendor express number total annual rent amount monthly rent part year rent explanation of change lead agency Easement rights
Cooperative	An agreement with nonfederal entities to provide real estate space to USDA.	product
GSA Assignment	A specified area that is assigned by GSA.	GSA property identifier

Table 3-1. Data Entities and Elements

Name	Description	Attributes
		adjustment for GSA
GSA OA	An agreement between GSA and USDA for the occupancy of GSA managed property.	see Contract
Grant		level of involvement
Land	An area that is leased or owned by USDA.	land use classification codes land location land measurement land acquisition method land acquisition cost land negligible cost indicator lot area/parcel
Lease	A contract by which one conveys real estate or facilities for a specified term and for a specified rent.	lease effective date lease number lease renewal option adjustment for USDA
Lessor	An entity that conveys property by lease.	TIN number lessor POC lessor POC address lessor POC email lessor POC fax lessor POC phone number
Location	A position or site occupied by the property	Geographic Location Code (GLC) GSA region number Historical district installation Address. zip code and suffix congressional district GIS information
Occupant	An entity that occupies property by contract.	occupant type occupant POC occupant POC address occupant POC email occupant POC phone number

Table 3-1. Data Entities and Elements

Name	Description	Attributes
		occupant POC fax office number and room assignment office hours organization
Owned Property	A property that is owned by USDA.	date of acquisition depreciation information appraisal date appraised value acquisition cost date acquired from date acquired to
Partnership		roles/responsibilities
Permit		special use
Program	A federal agency occupying or willing to occupy a space managed by USDA.	agency bureau code agency bureau name type of program commodity group total number of individuals federal employees part-time employees partner agency research number title of project
Property	A specified area that is leased or owned by USDA.	real property ID property type property status Installation identifier heritage property stewardship property fair value highest and best use excess indicator historical indicator hazard code utilization data

Table 3-1. Data Entities and Elements

Name	Description	Attributes
		last survey date
		survey result
		baselining information
		deferral
		emergency task force
		next survey date
		change in mission
		GSA assistance needed
		USDA POC
		USDA phone number
		USDA email
		USDA fax
		cost per lease/consideration
		GSA property ID
		GSA classification
		treasury symbol
Reimbursable		reimbursement
Security Measure	A step taken to ensure the security of a building: control entry, security guard, electronic equipment, etc.	number of security guards number of card readers number of security cameras security equipment
Space	A space or a partial space occupied.	square feet allocation rentable space square feet usable space square feet multi-tenant floor space free space shared space unique agency space office status (closed, relocated, etc) change in mission number of leases predominant use code total square feet GSA assistance needed GSA space use code

Table 3-1. Data Entities and Elements

Name	Description	Attributes
		anticipated excess date deferral depreciation information excess indicator excess square footage office type
Space Requirement	A specification of the need for space by a client.	estimated cost estimated fee cost estimated square footage
Support and Maintenance	A performance of a support activity such as repair or maintenance, concierge, etc.	number of parking spaces cleaning service utilities services disabled access daycare services antennae telecommunications concierge services
USDA Lease	A contract by which a private party conveys real estate or facilities to USDA for a specified term and for a specified rent.	see "Lease"
USDA Leased	A specified area that is leased by USDA.	number of leases

Table 3-2. Descriptions of Data Elements

Data element	Description
acquisition cost	The acquisition cost includes all costs incurred to bring the property to a form and location suitable for its intended use.
adjustment date	Date of modifications made to a contract.
adjustment for GSA	Modifications made to a contract in relation to a GSA assignment.
adjustment for USDA	Modifications made to a contract in relation to a USDA lease.
adjustment type	Type of adjustment made to a contract.

Table 3-2. Descriptions of Data Elements

Data element	Description
agency bureau code	Four-digit GSA-provided code identifying the agency and bureau.
agency bureau name	Name identifying the agency and bureau.
agency agreement number	Number identification of an agency on a contract.
annual rental amount	The total annual rental amount for the installation or sub-installation.
antennae	Presence of an antenna on a property.
anticipated excess date	Date an installation is expected to be released.
appraisal date	Date of an appraisal conducted on a property.
appraised value	Value from an appraisal conducted on a property.
area/parcel	Segment land is located on.
baselining information	Information pertaining to space considered unwarranted and deferred
budget information	Information pertaining to budget.
budget source	The source for budget.
building measurement	Number of buildings per predominant usage code, and the total square footage per predominant usage code.
building name	The building name in the case of a single building.
building negligible cost indicator	Indication whether the total acquisition cost for the building is less then $500.
building predominant use classification codes	Two-digit code identifying all of the predominant use classification codes on an installation or sub-installation.
business district	Name of business district where property is located.
change in mission	Change in the need for or the use of the property.
cleaning service	Indication of cleaning services present on property.
commodity group	Name of commodity group represented on the space.
common agreement number	CAN (common agreement number) as their vendor code for all intradepartmental transactions.
common vendor number	Number assigned to identify vendor used for non-USDA entities and non-federal entities.
concierge services	Indication of concierge services present on property.
congressional district	Two-digit number of the Congressional district where the installation or sub-installation is located.

Table 3-2. Descriptions of Data Elements

Data element	Description
contractor fax number	Contractor point of contact's fax number.
contractor phone number	Contractor point of contact's phone number.
contractor POC	Contractor point of contact responsible for upgrades or enhancements conducted on property.
contractor POC address	Contractor point of contact's full mailing address.
contractor POC email	Contractor point of contact's email address.
COR	Indication whether a Contracting Officer's Representative (COR) exists..
COR address	The Contracting Officer's Representative (COR) full mailing address.
COR email	The Contracting Officer's Representative (COR) email address.
COR fax number	The Contracting Officer's Representative (COR) fax number.
COR phone number	The Contracting Officer's Representative (COR) phone number.
COR POC	The Contracting Officer's Representative point of contact.
cost allocation	Dollar amount of allocation of cost for space.
cost per lease/consideration	Amount charged per contract.
date acquired from	Earliest date property was acquired at the installation or sub-installation.
date acquired to	Latest date property was acquired at the installation or sub-installation.
daycare services	Indication of daycare services present on property.
deferral	Indication that the property meets established survey deferral criteria.
depreciation information	The loss in service value of property measured in terms of cost allocated to a period of time.
disabled access	Indication of disabled access needs met on property.
easement rights	Specification of any liberty and/or privileges an occupant possesses on a space.
emergency task force	Indication of emergency task force present on property.
end date	Date of contract termination.
estimated cost	Estimation of cost for space requested.
estimated fee cost	Estimation of fee cost for space requested.
estimated square feet	Estimation of total square feet of space requested.

Table 3-2. Descriptions of Data Elements

Data element	Description
excess indicator	Installations declared identified as excess.
excess square footage	Total square footage of space declared excess.
explanation of change	Explanation of changes or adjustments made to contract.
FACS bureau code	
FACS ID	
fair value	Price for which an asset could be bought or sold.
fee	Amount charged for services.
finance POC	Finance point of contact
finance POC address	Finance point of contact full address.
finance POC email	Finance point of contact email address.
finance POC fax number	Finance point of contact fax number.
finance POC phone number	Finance point of contact phone number.
floor space	Total square footage of a particular area of a given installation.
free space	Total square footage of unoccupied space of a given installation.
funding source allocation (%)	Allocation of financial resources represented in percentages.
funding source amount ($)	Amount of financial resources amount represented in dollars.
Geographic Location Code (GLC)	Nine-digit GSA-provided code identifying the property's geographic location.
GIS information	Location Information for Geographic Information Systems.
GSA assistance needed	Whether GSA assistance is needed on a property.
GSA classification	Property category specified by GSA.
GSA property ID	Identification of GSA property.
GSA region number	GSA assigned region number.
GSA space use code	GSA assigned space use code.
hazard code	
heritage property	Indication of property classified as heritage.

Table 3-2. Descriptions of Data Elements

Data element	Description
highest and best use	Best use of property in order to produce the highest monetary return, promotemaximum value, or serve a public or institutional purpose.
historical building indicator	Indication for a building or any portion of a building having historical or natural significance; cultural or significant architectural characteristics.
historical district	Location of property in a historical district.
historical indicator	Indication of property of a portion of property having historical or natural significance; cultural or significant architectural characteristics.
infrastructure enhancement cost	Total cost of infrastructure related enhancements conducted on property.
infrastructure enhancement date	Date infrastructure related enhancements were conducted on property.
infrastructure enhancement type	Type of infrastructure related enhancements conducted on property.
installation address	The installation or sub-installation street address.
installation identifier	Seven-alpha/numeric code identifying an installation's headquarters location.
land acquisition cost	Total acquisition costassociated with each land use classification code on an installation or sub-installation.
land acquisition method	Method of land acquisition used.
land location.	Location of land in urban or rural area.
land measurement	Total number of acres, to the nearest tenth acre.
land negligible cost indicator	Indication of total acquisition cost for land less than $500.
land use classification codes	Identification of different uses of land on an installation.
last survey date	The date of last survey conducted on property.
lead agency	Identification of lead agency on contract.
lease effective date	Date the lease becomes effective.
lease number	Unique number assigned to identify lease.
lease renewal option	Number of years specified in lease for renewal.
leased agency	Agency the space is leased to.
lessor POC	Lessor point of contact.
lessor POC address	Lessor point of contact full address.

Table 3-2. Descriptions of Data Elements

Data element	Description
lessor POC email	Lessor point of contact email address.
lessor POC fax number	Lessor point of contact fax number.
lessor POC phone number	Lessor point of contact phone number.
level of involvement	Level of involvement of parties associated with grants.
lot	Lot a land resides on.
monthly rent	Monthly payment for a space.
multi-tenant	Indication whether a space contains multi-tenants.
mutual beneficial	Indication of a mutually beneficial challenge agreement.
next survey date	Date of next survey planned to be conducted on property.
number of card readers	Total number of card readers located in a property.
number of days effective	The number of days a contract is effective.
number of federal employees	Number of federal employees in space.
number of individuals	Total number of individuals present on property.
number of leases	Total number of leases on the installation or sub-installation.
number of parking spaces	Total number of parking spaces present on property.
number of part-time employees	Total number of part-time employees present on property.
number of security cameras	Total number of security cameras located on a property.
number of security guards	Total number of security guards assigned to property.
occupant POC	Occupant point of contact.
occupant POC address	Occupant point of contact full address.
occupant POC email	Occupant point of contact email address.
occupant POC fax	Occupant point of contact fax number.
occupant POC phone number	Occupant point of contact phone number.
occupant type	Indication for type of occupant.
office hours	Office hours of operation.

Table 3-2. Descriptions of Data Elements

Data element	Description
office number and room assignment	Office number and room assignment of an occupant.
office status	Classification of new, closed, or relocated office.
office type	Categorization of office space as part time office, area sub office, local sub office, or local office.
organization	Organization occupying space.
part year rent	Payment of space in a given segment of a year.
partner agency	Identification of partner agency.
period of agreement	Period an agreement encompasses.
predominant use code	Identification of predominant utilization for space.
product	Product associated with a cooperative agreement.
property status	USDA-owned, leased, GSA assigned, or cooperative agreement classification of property.
property type	Specification of property as a building or land.
real property ID	Identification assigned a given property.
reimbursement	Total amount or reimbursement associated with a reimbursable agreement.
renewal options	Number of years specified in contract for renewal.
rentable space square feet	Square footage of space available for rental.
research number	Number assigned identifying a specific research entity.
roles/responsibilities	Roles and responsibilities specified to parties associated with a partnership agreement.
security enhancement cost	Total cost for security enhancement conducted on property.
security enhancement date	Date of security enhancement conducted on property.
security enhancement type	Type of security enhancement conducted on property.
security equipment	Security equipment present on property.
services provided	The level of services provided either full or partial.
shared space	Identification of shared space.
special use	Identification of a special use permit.
square feet allocation	Square feet allocation of space.

Table 3-2. Descriptions of Data Elements

Data element	Description
start date	Date a contract begins.
stewardship property	Identification of property and property rights owned by the Federal Government.
survey result	Outcome of last survey conducted on property.
telecommunications	Telecommunication equipment present on property.
telecommunications cost	Total cost for telecommunication equipment.
term	The termination of contract.
termination clause	Stipulation specifying termination of a contract.
TIN	Tax Identification Number
title of project	Title of project associated with the occupation of property.
total annual rental amount	Total annual payment for a space
total number of individuals	Total number of individuals present on the property.
total square feet	Total square footage of property.
transaction code	Identification of new installation, or sub-installation
treasury symbol	Two digit code that identifies the agency
type of agreement	Identification of the type of agreement..
type of enhancement	Type of enhancement conducted on the property.
type of improvement	Type of improvement made on the property.
type of program	Type of program present on the property.
unique agency space	
usable space square feet	Amount of usable square feet.
USDA phone number	Phone number of USDA point of contact.
USDA POC	USDA point of contact.
USDA POC Address	USDA point of contact full address.
USDA POC address	USDA point of contact full address.
USDA POC email	USDA point of contact email address.

Table 3-2. Descriptions of Data Elements

Data element	Description
USDA POC fax	USDA point of contact fax number.
utilities enhancement cost	Total cost for enhancements of utilities on property.
utilities enhancement date	Date of enhancements for utilities on property.
utilities enhancement type	Type of enhancements for utilities on property.
utilities services	Identification of utilities services present on property.
utilization data	Information concerning how well an installation is used.
vendor express number	
zip code and suffix	Zip codein which the installation or sub-installation is located.

Data Elements associated with Process

Manage design and construction

adjustment for GSA	utilities enhancement cost	disabled access
appraisal date	utilities enhancement date	end date
budget information	utilities enhancement type	estimated cost
budget source	utilities services	estimated fee cost
building measurement	type of enhancement	estimated square feet
building name	type of improvement	excess indicator
building/space type	land measurement	explanation of change
cleaning service	GSA property identifier	fair Value
contractor POC	heritage property	finance address
contractor POC address	historical building indicator	finance email
contractor POC phone number	historical district	finance name
contractor POC fax number	historical indicator	finance number
contractor POC email	zip code and suffix	finance phone number
Geographic Location Code (GLC)	antennae	finance POC
GIS information	Manage USDA leases	floor space
infrastructure enhancement cost	adjustment for USDA	Geographic Location Code (GLC)
infrastructure enhancement date	adjustment type	GIS information
infrastructure enhancement type	annual rent	GSA property identifier
installation address. installation identifier	anticipated excess date	GSA region number
	cleaning service	hazard code
security enhancement cost	congressional district	heritage property
security enhancement date	cost allocation	historical district
security enhancement type	cost per lease/consideration	installation Address.
security enhancements	depreciation information	installation identifier

lease effective date

lease number

lease renewal option

leased agency

monthly rent

number of days effective

number of parking spaces

occupant email

occupant phone number

occupant address

occupant fax

occupant POC

occupant type

office number and room assign-ment

office type

renewal options

renewal rights

research number

rural area

services provided

shared space

space allocation

square feet allocation

start date

termination clause

TIN number

title of project

total square feet

transaction code

type of program

vendor express number

zip code and suffix

term

Manage GSA Assignments

adjustment for GS

annual rent

anticipated excess date

cleaning service

congressional district

cost allocation

cost per lease/consideration

disabled access

end date

estimated cost

estimated fee cost

estimated square feet

excess indicator

explanation of change

fair Value

finance address

finance email

finance name

finance number

finance phone number

finance POC

floor space

Geographic Location Code (GLC)

GIS information

GSA assistance needed

GSA property identifier

GSA region number

heritage property

historical district

installation Address.

installation identifier

monthly rent

number of days effective

number of parking spaces

occupant email

occupant phone number

occupant address

occupant fax

occupant POC

occupant type

office number and room assignment

research number

rural area

services provided

shared space

space allocation

square feet allocation

start date

termination clause

title of project

total square feet

transaction code

type of program

vendor express number

zip code and suffix

term

Manage land leases

annual rent

anticipated excess date

area/parcel

cleaning service

congressional district

cost allocation

cost per lease/consideration

disabled access

end date

estimated cost

estimated fee cost

estimated square feet

excess indicator

explanation of change

fair Value

finance address

finance email

finance name

finance number

finance phone number

finance POC

floor space

Geographic Location Code (GLC)

GIS information

GSA property identifier

GSA region number

heritage property

historical district

installation Address.

land location (urban or rural area).

land measurement

land use classification codes

monthly rent

number of acres

number of days effective

number of parking spaces

occupant email

occupant phone number

occupant address

occupant fax

occupant POC

occupant type

office number and room assignment

research number

rural area

services provided (full or partial)

shared space

space allocation

square feet allocation

start date

termination clause

title of project

total square feet

transaction code

type of program

vendor express number

zip code and suffix

lot

parcel

term

Manage agreements

annual rent	floor space	office type
anticipated excess date	free space	period of agreement
cleaning service	Geographic Location Code (GLC)	region, area, district, state, county
common agreement number	GIS information	research number
common vender number	GSA assistance needed	roles/responsibilities
congressional district	GSA property identifier	rural area
cost allocation	GSA region number	services provided
cost per lease/consideration	hazard code	special use
disabled access	historical district	shared space
easement rights	installation Address.	space allocation
end date	installation identifier	square feet allocation
estimated cost	level of involvement	start date
estimated fee cost	monthly rent	termination clause
estimated square feet	mutual beneficial	title of project
excess indicator	number of days effective	total square feet
explanation of change	number of parking spaces	transaction code
fair Value	occupant email	type of agreement
federal employees	occupant phone number	type of program
finance address	occupant address	USDA phone number
finance email	occupant fax	vendor express number
finance name	occupant POC	zip code and suffix
finance number	occupant type	permits
finance phone number	office number and room assignment	product
finance POC		term

Manage property

cost allocation	estimated cost	fair Value
cost per lease/consideration	estimated fee cost	federal employees
depreciation information	estimated square feet	floor space
end date	excess indicator	free space

GSA property identifier

hazard code

heritage property

head count

highest and best use

infrastructure enhancement cost

installation identifier

infrastructure enhancement date

infrastructure enhancement type

land acquisition cost

land negligible cost indicator

land use classification codes

level of involvement

monthly rent

organization in building

partner agency

part-time employees

property status

property type

real property ID

renewal options

renewal rights

rentable space square feet

research number

security enhancement type

security enhancement date

security enhancements

shared space

space allocation

square feet allocation

telecommunications cost

total annual rental amount

total cost

total number of individuals

total square feet

type of agreement

type of enhancement

type of improvement

type of program

unique agency space

upgrade cost

utilities enhancement cost

utilities enhancement date

utilities enhancement type

zip code and suffix

agreements

antennae

authority

cameras

concierge

daycare

deferral

equipment

fee

guard

multi-tenant

parking

term

land acquisition method

part year rent

period of agreement

acquisition cost

adjustment date

anticipated excess date

appraisal date

appraised value

area/parcel

baselining information

budget information

budget source

building acquisition cost

building measurement

building name

building negligible cost indicator.

building occupant agency

building predominant use classification codes

building/space type

bureau code

bureau name

cleaning service

commodity group

common agreement number

common vender number

congressional district

COR (if there is one)

COR address

COR email

date acquired from

date acquired to

date of acquisition	lessor name	rural area
disabled access	lessor phone number	security enhancement cost
emergency task force	lessor POC	services provided (full or partial)
Geographic Location Code (GLC)	next survey date	survey date
GIS information	number of acres	survey result
GSA assistance needed	number of leases	usable space square feet
GSA region number	number of parking spaces	USDA address
historical building indicator	occupant email	USDA Address
historical district	occupant phone number	USDA email
historical indicator	occupant address	USDA fax
installation Address.	occupant fax	USDA name
last survey date	occupant POC	USDA phone number
lessor address	occupant type	USDA POC
lessor email	office number and room assignment	utilities services
lessor fax		telecommunications

Manage real property portfolio

adjustment for GSA	building predominant use classification codes	cost allocation
adjustment for USDA		COR POC
adjustment type	building/space type	date of acquisition
annual rent	bureau code	property type (building or land)
anticipated excess date	bureau name	real property ID
appraisal date	business district	record type
appraised value	building acquisition cost	acquisition cost
budget information	land acquisition cost	adjustment date
budget source	land acquisition method	congressional district
building measurement	land location	date acquired from
building name	land measurement	depreciation information
building negligible cost indicator.	land negligible cost indicator	disabled access
building occupant agency	land use classification codes	end date
	cost per lease/consideration	fair Value

floor space	historical district	Telecommunications cost
free space	installation Address.	total annual rental amount
Geographic Location Code (GLC)	installation identifier	total cost
GIS information	last survey date	usable space square feet
GSA property identifier	number of acres	utilization data
GSA region number	rentable space square feet	zip code and suffix
heritage property	security enhancement cost	

Manage contracting and procurement

building measurement	cost per lease/consideration	zip code and suffix
building name	date acquired from	acquisition cost
building negligible cost indicator.	date acquired to	adjustment date
building occupant agency	Geographic Location Code (GLC)	appraisal date
building predominant use classification codes	GIS information	appraised value
land acquisition cost	GSA property identifier	budget information
land acquisition method	GSA region number	cost allocation
land location (urban or rural area).	hazard code	date of acquisition
land measurement	heritage property	number of acres
land negligible cost indicator	historical building indicator	office type
land use classification codes	historical district	property type
area/parcel	historical indicator	real property ID
budget source	installation Address.	transaction code
building/space type	installation identifier	
	rural area	

Provide physical security

adjustment date	date of acquisition	GSA property identifier
bureau code	disabled access	
bureau name	federal employees	historical district
card readers	Geographic Location Code (GLC)	installation Address.
congressional district	GIS information	installation identifier

office number and room assign-
ment

office hours

part-time employees

Manage business performance

federal employees

number of parking spaces

occupant POC email

occupant POC phone number

occupant POC address

occupant POC fax

occupant POC

occupant type

anticipated excess date

building/space type

rural area

start date

total number of individuals

zip code and suffix

GSA property identifier

GSA region number

historical building indicator

historical district

historical indicator

installation Address.

installation identifier

land location

land measurement

number of parking spaces

number of cameras

number of security guards

number of part-time employees

number of full-time employees

occupant type

office number and room assign-
ment

rural area

total square feet

zip code and suffix

Chapter 4
Application Architecture

The application architecture addresses application systems and modules, as well as their relationships to business processes, organizations, and data. Major influences on the application architecture include technologies employed, operations processes, and interface requirements. Analysis of current business applications forms the basis for identifying applications that better support the current and future business processes. Moreover, through analysis of each application vis-à-vis its business function, an organization can determine the overall impact of changing any individual application.

We began our analysis by inventorying the applications used to manage the USDA.

APPLICATION INVENTORY

Table 4-1 lists all of the applications sorted by owner, and by application name.

Table 4-1. Application Inventory

Owner	Acronym	Application Name	Definition	Application Type	Description
	Approach				Centralized system used to track GSA leases and owned property
	Architecture Desktop				
	AutoCad				
	Facility Center				
APHIS/GIPSA/AMS	APHIS/GIPSA/AMS Agency Lease Access DB	APHIS/GIPSA/AMS Lease Access Database			Centralized database tracking USDA Agency leases.
DA/OO/D&C	DA OO D&C Access DB				
DA/OO/D&C	DA OO D&C Excel Spreadsheet				
FNS	FNS Excel Spreadsheet				
FS	FS INFRA	Forest Services Infrastructure System			Real property management system developed by the Forest Service. INFRA consists of more than 20 asset management applications that support inventory control, condition surveys, work planning, deferred maintenance reporting, permittee improvements, capitalized transaction tracking, and depreciation calculations.
FS	FS Lease Access DB				Access database used by FS regions to track leases.
FSA	FSA Modified FIRM	Farm Service Agency Modified Foundation Information for Real Property Management System			FSA modified FIRM system used to manage USDA leases.

Table 4-1. Application Inventory

Owner	Acronym	Application Name	Definition	Application Type	Description
FSIS	FSIS Access DB				
FSIS	FSIS Excel Speadsheet				
GSA	FIRM	Foundation Information for Real Property Management System			FIRM was developed by GSA to help federal agencies manage their real property assets and to provide a reporting mechanism for meeting GSA's and OMB's reporting requirements relating to real property and space management.
GSA	STAR	System for Tracking and Administering Real Property			System that provides employees with direct access to business data supporting management of space and customer billing records. This system is the primary tool used to track and manage the government's real property information.
USDA	Corporate INFRA	Corportate Infrastructure System			Real property management system under development by the Forest Service for use USDA-wide.
USDA	IAS	Integrated Acquisition System			A web-based eProcurement solution designed to streamline and automate contract management and acquisition processes throughout USDA, and ultimately enhance support of USDA mission-critical activities.
USDA	PROP	Personal Property System			PROP is used to manage and control accountable, leased, loaned, sensitive, and excess personal property, except property in the Forest Service's working capital fund (WCF). It also provides automated fleet management capabilities for USDA vehicles.
USDA	PURCH	Purchase Order System			PRCH provides a complete procurement system for the purchase of goods and services from commercial or Government supply sources.
USDA	FFIS	Foundation Financial Information System			The corporate USDA financial management system and the system of record for all USDA agencies.

ORGANIZATIONS SUPPORTED BY APPLICATIONS

The attached Excel workbook shows the number of users within the USDA for each application. The reader will be able to determine which applications are available to the USDA and who uses them from this table.

Chapter 5
Technology Architecture

INTRODUCTION

The technology architecture addresses the network descriptions, components, and workings of the technical architecture in place. Influences include communications networks, equipment capacities, operational procedures, and technology capabilities. The purpose of documenting the technology architecture is to enable assessment of the existing technologies used to carry out key activities such as data security, preparation, storage, and retrieval across functional, organizational, and geographic boundaries, as well as the potential ramifications of changing those technologies.

INVENTORY OF TECHNOLOGY PRODUCTS

This section contains the inventory of technology products used by USDA to carry out its daily activities. Table 5-1 is a complete list of the products and their definitions.

Table 5-1. List of Technology Products

Name	Description
DOS Windows	Family of operating systems for personal computers (includes Windows 95, 98, and 2000). Windows dominates the personal computer world, running, by some estimates, on 90% of all personal computers. Windows provides a graphical user interface (GUI), virtual memory management, multitasking, and support for many peripheral devices.
LAN	Local Area Network.
Lotus Notes	Graphical development system for Windows that is used to create customer Lotus Notes applications.Product that provides strong replication capability and synchronizes databases distributed in multiple locations and to mobile users.
MS Access	Technology for creating databases and programs to track and manage information.
MS Excel	Technology for creating spreadsheets and programs to track and manage information.
MS Office Professional	Suite of Microsoft's primary desktop applications for Windows and Macintoshes. MS Office includes some combination of Word, Excel, PowerPoint, Access and Schedule along with a host of Internet and other related utilities.
MS Project	Standard commercial software for project planning and management which allows for collaborative planning and project supervision.
MS SQL	Database management product from Microsoft that can respond to queries from client machines formatted in the SQL language.
MS SQL Server	Database management product that can respond to queries from client machines formatted in SQL; specific version unknown.

Table 5-1. List of Technology Products

Name	Description
Oracle Enter-prise	Integrated and flexible set of development tools and servers for delivering e-business solutions (may be Version 8.0.5).

ORGANIZATIONS SUPPORTED BY TECHNOLOGY

The attached Excel workbook shows the number of users within the USDA for each technology. The reader will be able to determine which technologies are available to the USDA and who uses them from this table.